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09/832,753	04/10/2001	Michael Topolovac	OPEN-001	3355

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ARRIS INTERNATIONAL, INC
11450 TECHNOLOGY CIRCLE
DULUTH, GA 30097

EXAMINER

TRUONG, CAM Y T

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 02/03/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/832,753

Applicant(s)

TOPOLOVAC ET AL.

Examiner

Cam Y T Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant has canceled claims 1-3 and added claims 4-23 in the amendment filed on 5/29/03.

Applicant's arguments with respect to claims 4-23 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claim 4-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Rivette (USP 6339767).

As to claim 4, Rivette teaches the claimed limitations:

“storing the plurality of BOMs in a processing system” as storing BOMs in database in a processing system (fig. 47, col. 22, lines 30-35),

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“each BOM describable as a tree with each node an element” as each BOM is a hierarchical and recursive data structure that identifies the subassemblies of a product with many nodes where the first node is an element Frame, second node is an element Screw. Each hierarchical BOM is represented as a tree (fig. 22, col. 70, lines 42-55),

“each element in each BOM associated with an owner of a set owners” each record or patent in each BOM associated with an Corp_entity_ID of a set Corp_entity IDs. An Corp_entity_ID is represented as an owner (col. 77, lines 25-35; col. 74, lines 35-55),

“each BOM associated with an owner of the set of owners, such that BOMS associated with different owners are stored in the same processing system” as BOMS are associated with different Corp_entity_Ids such as Corp1, Corp2 of the set of Corp_entity_Ids (fig. 36, col. 77, lines 25-35; col. 74, lines 35-55).

As to claim 5, Rivette teaches that “wherein at least one of the BOMs includes confidential information of the owner of the BOM such that unrestricted access to the confidential information is limited to the owner and any designates of the owner of the BOM (col. 39, lines 40-65).

As to claim 6, Rivette teaches the claimed limitation “wherein the BOMs are stored remotely, and wherein access to the BOMs is provided remotely” as (figs. 9).

As to claim 7, Rivette teaches the claimed limitation "wherein the storing of the BOMs includes: storing one or more data structures in the processing system for storing the plurality of BOMs, the method further comprising: storing a list of elements in the processing system, each element in the list of elements having a unique element identifier, each element in each BOM being one of the elements in the list of elements, such that the list of elements and the one or more data structures are part of a database stored in the same processing system" as (figs. 142-145, col. 76, lines 45-65).

As to claim 8, Rivette teaches the claimed limitation "providing unrestricted access to any confidential information in a particular stored BOM only to the owner associated with the particular BOM and to none or more designates of the owner" as (col. 39, lines 40-65).

As to claims 9 and 12, Rivette teaches the claimed limitation "restricting access to information about a particular element in the element list that is associated with a particular owner to the particular owner and none or more designates of the particular owner" as (col. 39, lines 40-65).

As to claim 10, Rivette teaches the claimed limitations:

"storing a database in a processing system, the database including: a list of elements, each element having a unique identifier, one or more elements of the list of elements being for inclusion in one or more of the plurality of BOMs" as each record in

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the BOM table 1217 includes a BOM_id attribute which stores a key that is unique to the associated BOM node. The BOM table 1217 is included in the BOM databases 626 (col. 71, lines 52-67; col. 72, lines 1-5);

“one or more data structures for storing the plurality of BOMs” as storing BOMs in databases 626 and database 4808 (col. 74, lines 64-65; col. 75, lines 4-5);

“each BOM describable as a tree with each node an element of the list of elements” as BOM 2202 is described as a tree with each node an element of the list of elements such as Frame, Screw, Wheel, Rim and Tire. BOM 2320 is described as a tree with each node an element of the list of elements such as Lawn Mower, Frame, Screw, Engine (figs. 22-23A, col. 71, lines 1-30);

“two of the BOMs associated with respective owners of a set of owners, two or more of the BOMs being associated with a respective owner of the set of owners”. Rivette teaches that a BOM group that is titled Video conversions of vide is associated with respective owners Sanyo Electric Co and The United States. Another BOM group that is titled Digital video recorder ope is associated with respective Sonora of a set same owners as such Sonora. Each group of BOM can be represented as a BOM (col. 88, lines 1-30);

“providing remote access to one or more elements of information in the database to one or more users such that the database may contain two BOMS associated with two different owners” as a user can search patents or BOM groups which are stored in a server 314 via Internet system. Where a BOM group that is titled Video conversions of video is associated with respective owners Sanyo Electric Co and The United States.

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Another BOM group that is titled Digital video recorder ope is associated with respective Sonora of a set same owners as such Sonora. Each group of BOM can be represented as a BOM (col. 34, lines 45-67; col. 55, lines 1-35; col. 88, lines 1-30).

As to claim 11, Rivette teaches the claimed limitation "wherein at least one of the BOMs includes confidential information of the owner of the BOM such that unrestricted access to the confidential information is limited to the owner and any designates of the owner of the BOM" as a BOM table 1217 includes a record for each unique BOM node of each BOM of interest. In order to extend the security methodology of the present invention to the BOM databases 626, it is only necessary to modify the BOM table 1217 to include an owner_user_id attribute. The BOM database 626 is associated with assignees. This information shows that BOM database 626 includes owner_user_id attributes such that unrestricted access to the confidential information is limited to owner (col. 85, lines 9-15; col. 84, lines 50-67).

As to claims 13 and 20, Rivette teaches the claimed limitation "wherein a first BOM of a first owner may share one or more elements of the list of elements with a second BOM of a second owner" as the BOM group of source patent 4701102 may share one issuedate 110587 of the list of element with another BOM group of source 5003933 (fig. 63).

As to claim 14, Rivette teaches the claimed limitations:

"storing a database in a processing system, the database including: a list of elements, each element having a unique identifier, one or more of the elements being for inclusion in at least one of the BOMs" as storing BOM databases 626 that includes a BOM table 1217. This table has records. Each record of BOM table 1217 includes a BOM_id attribute, which stores a unique key to the associated BOM node (col. 71, lines 52-65; col. 72, lines 1-5);

"one or more BOM data structures for storing the plurality of BOMs" as the BOM table 1217 stores one record for the screw part. The BOM_BOM_xref table 1219 includes a record for each parent/child relationship in the BOMs represented in the BOM table 1217. Tables 1219 and 1217 are represented as BOM data structures (col. 71, lines 65-67; col. 72, lines 25-30),

"each BOM describable as a tree with each node an element of the list of elements and each branch of the tree defining a parent-child relationship" as the one or more BOM data structures storing information on the parent-child relationships of the plurality of BOMs, two or more of the BOMs associated with a respective owner of the set of the owners",

"providing remote access to one or more elements of information in the database to one or more users, such that the database may contain BOMS having different owners" as a user can search patents or BOM groups which are stored in a server 314 via Internet system. Where a BOM group that is titled Video conversions of vide is associated with respective owners Sanyo Electric Co and The United States. Another BOM group that is titled Digital video recorder ope is associated with respective Sonora

of a set same owners as such Sonora. Each group of BOM can be represented as a BOM (col. 34, lines 45-67; col. 55, lines 1-35; col. 88, lines 1-30).

As to claim 15, Rivette teaches the claimed limitation "wherein the database includes confidential information of at least one of the owners such that unrestricted access to the confidential information is limited to the owner and any designates of the owner" as a BOM table 1217 includes a record for each unique BOM node of each BOM of interest. In order to extend the security methodology of the present invention to the BOM databases 626, it is only necessary to modify the BOM table 1217 to include an owner_user_id attribute. The BOM database 626 is associated with assignees. This information shows that BOM database 626 includes owner_user_id attributes such that unrestricted access to the confidential information is limited to owner (col. 85, lines 9-15; col. 84, lines 50-67).

As to claim 16, Rivette teaches the claimed limitation "wherein a BOM of a particular owner includes confidential information, and wherein the confidential information owner includes the BOM confidential information" as (col. 71, lines 50-65; col. 39, lines 40-65).

As to claim 17, Rivette teaches the claimed limitation "wherein providing remote access includes providing remote access via public network" as (fig. 4).

As to claim 18, Rivette teaches the claimed limitation "wherein the public network is the Internet" as (fig. 9):

As to claim 19, Rivette teaches the claimed limitations:

"wherein one or more elements in the element list is associated with a respective owner of the set of owners, wherein the list of elements includes an indication of ownership for each element associated with one of the owners" as (figs. 61-63, col. 88, lines 1-30),

"and wherein the confidential information of an owner that owns a element in the list of elements includes confidential information in the list of elements, such that unrestricted access to confidential information about a particular element in the element list that is associated with a particular owner is limited to the particular owner and none or more designates of the particular owner" as (col. 85, lines 9-15; col. 84, lines 50-67).

As to claim 21, Rivette teaches the claimed limitation "wherein each element in the element list is one the set consisting of a physical element and a process, wherein the physical element may itself be a BOM and wherein the process that may reference a set of steps or operations" as (col. 71, lines 20-40).

As to claim 22, Rivette teaches the claimed limitations:

"wherein each BOM data structure is for storing the parent-child relationships for at least one BOM of the plurality of BOMs" as (col. 72, lines 25-30),

“and wherein a BOM data structure includes, for a particular BOM, an entry for each element in the particular BOM, said element entry including a reference to the element's entry in the list of elements, an entry indicating the owner, and an entry indicating any child of the element in the case the element has a child in the tree representing the particular BOM” as (col. 72, lines 1-50).

As to claim 23, Rivette teaches the claimed limitation “wherein the parent child relations for all the BOMS are stored in a single BOM data structure” as (col. 72, lines 25-30).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Contact Information


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam-Y Truong whose telephone number is (703-605-1169). The examiner can normally be reached on Mon-Fri from 8:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (703-305-9790). The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-3900).

Cam-Y Truong

1/12/03


SHAHID ALAM
PRIMARY EXAMINER